

PCT

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INTERNATIONAL PRELIMINARY EXAMINATION REPORT
(PCT Article 36 and Rule 70)

REC'D 14 JAN 2004



Applicant's or agent's file reference 3748WO	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)	
International application No. PCT/NL 03/00003	International filing date (day/month/year) 07.01.2003	Priority date (day/month/year) 25.01.2002
International Patent Classification (IPC) or both national classification and IPC C08G69/04		
Applicant DSM IP ASSETS B.V. et al.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 5 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

 These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:
 - I ☒ Basis of the opinion
 - II ☐ Priority
 - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - IV ☐ Lack of unity of invention
 - V ☒ Reasoned statement under Rule 66.2(a)(II) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - VI ☐ Certain documents cited
 - VII ☐ Certain defects in the international application
 - VIII ☐ Certain observations on the international application

Date of submission of the demand 09.07.2003	Date of completion of this report 12.01.2004
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer Gerber, M Telephone No. +49 89 2399-8528 

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. **PCT/NL 03/00003**

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-17 as originally filed

Claims, Numbers

1-13 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
☐ the language of publication of the international application (under Rule 48.3(b)).
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority in written form.
☐ furnished subsequently to this Authority in computer readable form.
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
☐ the claims, Nos.:
☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

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**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement**

1. Statement

Novelty (N)	Yes: Claims	1-13
	No: Claims	
Inventive step (IS)	Yes: Claims	1-13
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-13
	No: Claims	

2. Citations and explanations

see separate sheet

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/NL03/00003

Re Item V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Reference is made to the following documents:

- D1:** EP-A-0 732 351 (FISCHER KARL IND GMBH) 18 September 1996, cited in the application
- D2:** US-A-3 821 171 (BEATON D) 28 June 1974, cited in the application
- D3:** US-A-5 955 569 (DUJARI RAMDAS ET AL) 21 September 1999
- D4:** US-A-5 859 177 (BERGER LUZIUS ET AL) 12 January 1999

1. Novelty

EP-A-0 732 351, which is deemed to represent the closest prior art, discloses a solid-state post-condensation process involving a polyamide, which is aimed at increasing the molecular weight thereof, the dew point of the inert gas ranging from 0 to 30°C. The subject-matter of claim 1 differs from D1 in that there is no mention of dew point for the gas atmosphere.

The subject-matter of **claims 1-13** is therefore novel over the available state of the art (Article 33(2) PCT).

2. Inventive step

The problem to be solved by the present invention may be regarded as to provide a process which enables to obtain a polyamide with increased molecular weight in shorter time with limited yellowing.

It is apparent from tables 1-3 that the fact of performing the SSPC process in two steps in inert gas atmospheres exhibiting different dew points results in polymers with higher viscosities in the same reaction time or require a shorter reaction time to reach the same viscosity level.

This was not foreseeable from the prior art and thus the subject-matter of **claims 1-13** can be considered inventive (Article 33(3) PCT).

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3. Industrial applicability

The subject-matter of present **claims 1-13** appears to comply with the requirements of industrial applicability as stipulated in Article 33(4) PCT.